NEWS

Limit rise to 1.5°C: avoid worst climate impacts

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The Intergovernmental Panel on Climate Change (IPCC) special report on 1.5°C of global warming.

Achieving a climate target of staying under 1.5°C would hold back many of the risks associated with a 2°C rise says the Met Office, following joint research by the Met Office and the University of Exeter.

Commenting ahead of the final outcome of the IPCC negotiations, The Met Office's Professor Richard Betts said: "Limiting the rise in warming to 1.5°C avoids many, but not all of the worst climate impacts seen at 2°C or above. For example, vulnerability to food insecurity increases in many countries as our world warms. An increase in global temperature is projected to cause more flooding in some areas and more drought in others. Both increases and decreases in rainfall are generally larger at 2°C global warming than at 1.5°C."

An analysis produced by the Met Office shows that the earth in 2018 has already warmed by 1°C, compared to pre-industrial levels. The analysis also shows that the vast majority of 1°C of warming reached so far can be attributed to human activity.

The Met Office analysis looks at a 30-year average of observations and estimates centred on 2018. Combining observation since 2003 and projections up to 2032, the Met Office has been able to construct a basic estimate of a 30-year climate average centred around 2018 to average centred giving an indication of where we are now. This method suggests a current global average of about 1°C above pre-industrial temperatures.

Professor Jason Lowe, of the Met Office Hadley Centre, said: "We've already experienced around 1°C of warming above the temperature levels seen before the industrial revolution, and a considerable body of evidence attributes a large fraction of this to human activity. This new report will help us better understand how quickly the world must now respond to have the greatest chance of limiting warming and climate impacts to lower levels."

To complement the publication of the IPCC 1.5°C special report, the Met Office Hadley Centre has produced three briefing notes which explore the following related topics:

COP 1.5 Report 1: Where are we now? - *What does a 1.5°C world mean and given that we've recently passed 1°C how close are we to exceeding the long-term goal?*

COP 1.5 report 2: What are the challenges? - *Achieving a 1.5°C goal will be challenging so how feasible is it and how might we achieve it?*

COP1.5 report 3: Impacts avoided compared to 2C - *What are the differences between impacts at 1.5 and 2°C for heatwaves, flooding and drought? What are the benefits for achieving 1.5°C?*

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